

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The Final Office Action of June 18, 2002 and the Advisory Action of September 24, 2002 have been received and contents carefully reviewed.

Claims 1-22 are pending. Claims 1, 12, and 18 have been amended. Applicant gratefully acknowledges the allowability of claims 2, 7, 8, 13, and 19 if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

As a preliminary matter, on September 4, 2002, Applicant submitted a copy of the request for priority and cover page, and a copy of the postcard, which show that the certified copy of the priority document was filed on April 23, 2001. Applicant respectfully requests the USPTO to acknowledge foreign priority under 35 USC § 119.

The Examiner rejected claims 1 and 12 under 35 USC § 102(e) as being anticipated by Lee (US Patent No. 6,226,057). Applicant respectfully traverses this rejection.

Independent claim 1 recites a combination of elements including a pixel electrode disposed in the pixel region, the pixel electrode overlapping one of the first and the second regions of the first data line, the pixel electrode overlapping one of the first and second regions of the second data line such that one of the first and second regions of the first data line and one of the first and second regions of the second data line are not overlapped by the pixel electrode.

Independent claim 12 recites a combination of elements including forming a pixel electrode in the pixel region to overlap one of the first and the second regions of the first data line, and to overlap one of the first and second regions of the second data line of the first and

second regions of the first data line and one of the first and second regions of the second data line are not overlapped by the pixel electrode.

None of the cited references teaches or suggests each and every element of these claims.

Lee discloses a pixel electrode 26 overlapping data line 22. In Figure 2A, it appears that the pixel electrode 26n overlaps first *and* second regions of the first data line 22n-1 and a first region of the second data line 22n (emphasis added). In column 8, Lee states that the first pixel electrodes 26n-1, 26n+1, 26n+3 have to be patterned such that they are overlapped with the source bus lines 22n-1, 22n, 22n+1, 22n+2 at left and right sides along a selected row, preferably to fully cover the source bus lines 22n-1, 22n, 22n+1, 22n+2. The second pixel electrodes 26n, 26n+2 have to be patterned such that they are overlapped with the source bus lines 22n-1, 22n, 22n+1, 22n+2 *and* the first pixel electrodes 26n-1, 26n+1, 26n+3 adjacent thereto in a selected row direction (emphasis added). Accordingly, it appears that the adjacent pixel electrodes overlap each other in Lee. In contrast, in the present application, a pixel electrode overlaps one of the first and the second regions of the first data line, and overlaps one of the first and second regions of the second data line such that one of the first and second regions of the first data line and one of the first and second regions of the second data line are not overlapped by the pixel electrode.

Applicant submits that claims 1 and 12 are allowable over the cited references since the cited references do not teach or suggest one of the first and second regions of the first data line and one of the first and second regions of the second data line are not overlapped by the pixel electrode as recited by claims 1 and 12. Applicant respectfully requests that the rejection under 35 USC § 102(e) be withdrawn.

The Examiner rejected claims 4-6, 10, 11, 15-17, 21, and 22 under 35 USC § 103(a) as being unpatentable over Lee (US Patent No. 6,226,057) and in view of Takemura (US Patent No. 5,757,444); and rejected claims 3, 9, 14, 18, and 20 under 35 USC § 103(a) as being unpatentable over Lee (US Patent No. 6,226,057) and Takemura (US Patent No. 5,757,444). Applicant respectfully traverses these rejections.

As discussed above, Lee does not teach or suggest a pixel electrode overlapping one of the first and the second regions of the first data line, and overlapping one of the first and second regions of the second data line such that one of the first and second regions of the first data line and one of the first and second regions of the second data line are not overlapped by the pixel electrode. None of the cited references, singly or in combination, teaches or suggests these features.

In fact, Lee teaches away from the invention in that adjacent pixel electrodes overlap each other. Takemura fails to cure the deficiencies of Lee.

Applicant submits that claims 2-11, and 13-22 are allowable over the cited references by virtue of their dependence on claims 1 and 12, which are believed to be allowable. Applicant respectfully requests that the rejections under 35 USC § 103(a) be withdrawn.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. Should the Examiner deem that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7371.

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If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136. Please credit any overpayment to deposit Account No. 50-0911.

Respectfully submitted,

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MARKED-UP VERSION OF THE AMENDED CLAIMS

1. (Amended) A liquid crystal display device comprising:

a substrate;

first and second gate lines formed on the substrate;

first and second data lines intersecting the first and second gate lines so as to define a pixel region, wherein each one of the first and second data lines has longitudinally separated first and second regions;

an insulating film covering the first and second gate lines and the first and the second data lines;

a pixel electrode disposed in the pixel region, the pixel electrode overlapping one of the first and the second regions of the first data line, the pixel electrode overlapping one of the first and second regions of the second data line such that one of the first and second regions of the first data line and one of the first and second regions of the second data line are not overlapped by the pixel electrode; and

a switching element disposed in the pixel region and connected between the second gate line and the pixel electrode.

12. (Amended) A method of manufacturing a liquid crystal display device, comprising the steps of:

providing a substrate;

forming first and second gate lines formed on the substrate;

forming first and second data lines intersecting the first and second gate lines so as to define a pixel region, wherein each one of the first and second data lines has longitudinally separated first and second regions;

forming an insulating film covering the first and second gate lines and the first and the second data lines;

forming a switching element disposed in the pixel region and connected between the second gate line and the pixel electrode; and

forming a pixel electrode in the pixel region to overlap one of the first and the second regions of the first data line, and to overlap one of the first and second regions of the second data line such that one of the first and second regions of the first data line and one of the first and second regions of the second data line are not overlapped by the pixel electrode.

18. (Amended) The method of claim [14] 13, wherein the pixel electrode extends over the first region of the first data line and extends over the second region of the second data line.